DFS Webinar
Clean Energy Financing for Community and Regional Lenders in New York State

June 10, 2021

amalgamated bank

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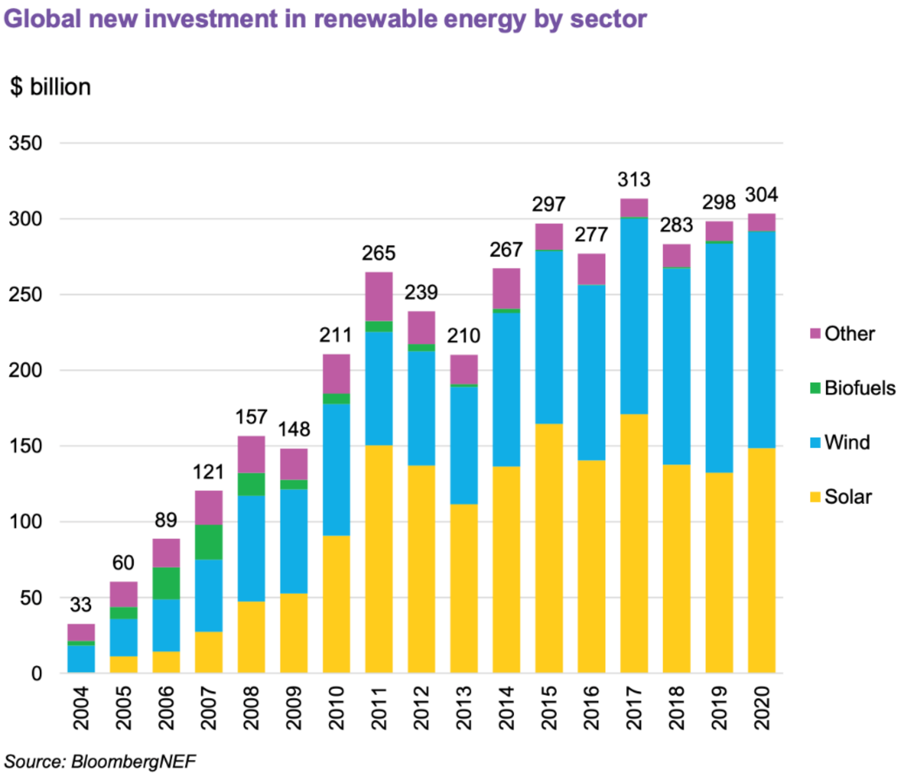
/ inclusiv /

Global Macro Trends in Green Investment



Global Investment in Energy Transition

- $501.3 billion in 2020
- 9% increase since 2019

Global Investment in Renewables

- $303.5 billion in 2020
- 2% increase since 2019

Global Investment in Solar

- $148.6 billion in 2020
- 12% increase since 2019
- Largest investment in renewables sector
- Largest growth in renewables sector

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U.S. Solar Market Growth

- In 2006 there were 31,000 homes with solar.
- **Today over 3 million homes have solar systems, and the market is expected to double by 2023.**
    - Nearly 60% drop in solar equipment costs, rebates and incentives (like the federal investment tax credit)
    - Homeowners often start exploring solar to save money on increasing utility bills.
    - Homeowners know they are doing something good for the environment while saving money.
- Increase in available capital and financing options for solar projects, at lower costs.

Opportunity: Green Lending for Community Lenders

Community-based financial institutions have deep community relationships and underwriting experience

Early adopters have built a significant renewable energy lending track record.

BUT

Relatively few community lenders currently offer specialized financing for solar or other clean or efficient energy projects.

Populations that community lenders serve are under-represented as clean and efficient energy users.

Trends: Green Financing via Community Lenders

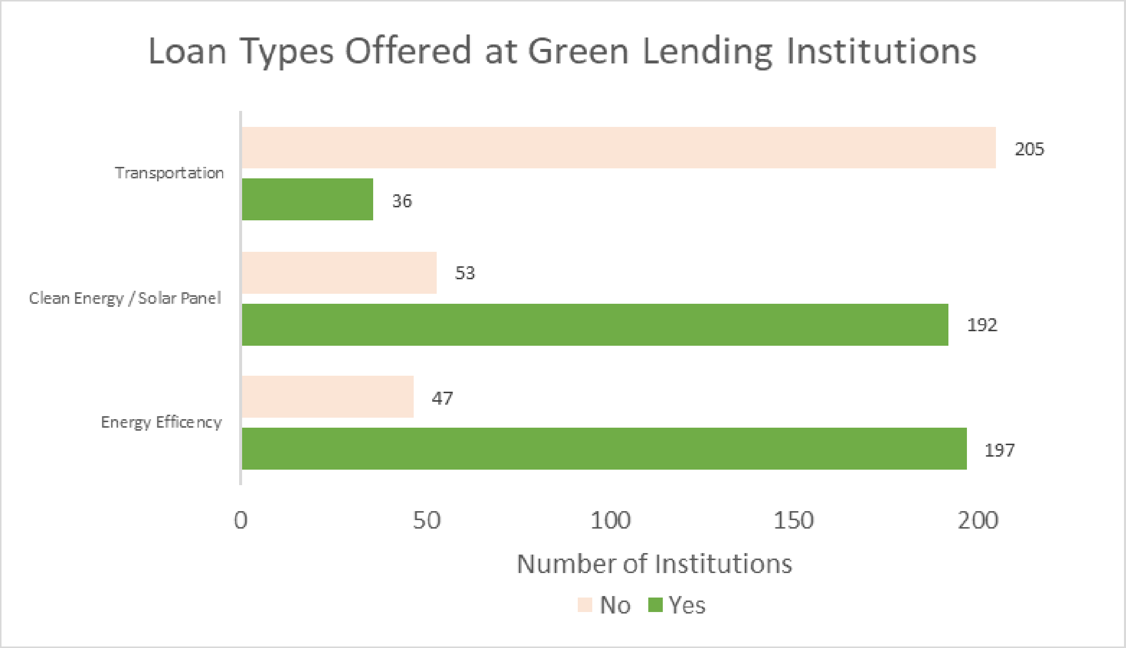
Out of 4,070 community financial institutions examined:

- **376 community financial institutions** involved in green lending
  (281 Credit Unions, 59 Loan Funds, 21 Banks, and 15 Financial Cooperatives in Puerto Rico)
  - 310 actively offer green loans
  - 66 are actively working to launch green loans in 2021

- 80 of 376 lenders disclosed green loan volume (dollars) and number of projects
  - **$643,269,912 total green loans originated**
    - $581,269,912 originated green loans (solar, energy efficiency, vehicle, other green)
    - $30,000,000 participation in green loan pools
  - **Over 31,925 green loan projects**

Trends: Green Loan Products via Community Lenders

310 institutions actively offering green loans



Growth: Community Lender Green Investing

- Mosaic: $3 billion loan purchase programs in residential solar and energy efficiency (2021).
- Mosaic: new $1.5 billion, multi-year loan purchase program with Congressional Bank.

- Tech CU: $2.5 billion in residential solar over the next three years through Sunlight Financial.
- Tech CU & SunPower: $1 billion in residential solar financing (2020).

- Amalgamated Bank: $160 million purchase of PACE assets (2020), $25 million loan facility to support NCS's solar projects in Washington DC (2019).

- PenFed CU: Announced partnership with Loanpal to buy solar loans.

- OnPoint Community CU: Offering 0.25% discount on home equity loans designated toward solar (2021).

- Clean Energy FCU: $5 million worth of loans in pipeline. $1 million in RE/EE loans to farmers in partnership with Organic Valley (2021)

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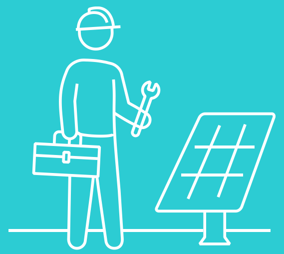
Deepen Your Financial Institution's Impact

Even before the coronavirus pandemic hit, 1 in 4 households struggled with high energy costs. Low-income households, older adults, and people of color experienced the heaviest burden.

Compared with non-Hispanic white households, Black households spend 43% more of their income on energy costs, Hispanic households spend 20% more, and Native American households spend 45% more.

Clean energy and energy efficiency can be powerful tools to drive economic revitalization by building good jobs, while increasing energy affordability and reliability.



NYSERDA Green Jobs Green New York and Loan Loss Reserve Programs

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New York State Energy Research and Development Authority

- NYSERDA is a public benefit corporation created in 1975 under Article 8, Title 9 and Title 9A of the State Public Authorities Law

- **Our Vision:** New York is a global climate leader building a healthier future with thriving communities; homes and businesses powered by clean energy; and economic opportunities accessible to all New Yorkers.
- **Our Mission:** Advance clean energy innovation and investments to combat climate change, improving the health, resiliency, and prosperity of New Yorkers and delivering benefits equitably to all.
- **Our Promise:** NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.

- Budgetary: 354 employees; $1.5 billion annual budget (primarily utility customer surcharges)

- NYSERDA is an experienced lender, working with an experienced loan originator and loan servicers, with over 10 years of experience in administering the GJGNY loan program. NYSERDA has issued 7 green revenue bonds totaling over $193 million supported by program loans

Pipeline Development

Developing a pipeline of projects requires working with contractors, community groups, and other community activists

- NYSERDA hosts periodic webinars for lenders and new lenders coming to the New York market.

- NYSERDA has a list of hundreds of actively engaged contractors and our outreach program provides the opportunity for lenders to showcase their programs. This is a very cost effective way to generate loan leads.

- NYSERDA is conducting an active market engagement working with our internal marketing group and consultants to expand climate finance in New York.

- NYSERDA is working with Inclusiv and NYCUA to develop engagement ideas for training, structural support, lead-gen, risk management and programmatic support to assist lenders in engaging in the market.

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Climate Leadership and Climate Protection Act (CLCPA)

Requires NYSERDA to review every Climate Impact intervention with a view of impact on Disadvantaged Communities ("DAC")

We review the following for each intervention:

Spending	Direct Agency spending on projects and investments ($)
Jobs and Training	Directly contracted training and jobs (FTEs) Supply chain jobs (associated with Agency spending but not directly contracted/controlled)
Participant Bill Savings	Participant energy bill savings ($) Energy bill assistance (credits for low-to-moderate-income customers) ($) Transportation fuel cost savings ($)
Energy and Fuel Savings [a]	Energy savings (MWh and MMBtu) Transportation fuel savings (MMBtu)
Air Quality	Avoided emissions from reduced on-site fossil fuel combustion [b] Avoided emissions from gasoline and diesel transportation fuels [b]
Health (longer-term)	Localized health impacts from reduced on-site fossil fuel combustion [c] Public health impacts from avoided gasoline and diesel transportation emissions [c] Public health impacts in air basin of power generation facilities from avoided fuel use [c]

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Green Jobs Green New York Data

- As of April 30, 2021
  - Issued over 31,200 residential loans,
  - Total of $372,422,027 in principal issued
  - Outstanding balance of $220,202,209

- Data Published monthly on OpenNY and on NYSERDA's website

NYSERDA's GJGNY Loan Program Portfolio – Delinquency

- The information set forth under the caption "Delinquency Experience – All Program Loans" and includes the experience to date of the Loan Program Portfolio.

Delinquency

Delinquency Experience - All Program Loans							
Date	Principal Amount Outstanding*	31-60 days	Percent of Total	61-90 days	Percent of Total	91-120 days	Percent of Total
31-Dec-11	$7,564,890	$48,981	0.65%	$8,638	0.11%	$ -	0.00%
31-Mar-12	11,423,588	-	0.00%	-	0.00%	-	0.00%
31-Mar-13	26,989,312	206,378	0.76%	78,889	0.29%	29,516	0.11%
31-Mar-14	42,635,130	320,497	0.75%	160,870	0.38%	94,367	0.22%
31-Mar-15	73,231,377	511,217	0.70%	288,363	0.39%	250,735	0.34%
31-Mar-16	141,389,314	904,140	0.64%	533,331	0.38%	393,057	0.28%
31-Mar-17	195,566,913	3,348,631	1.71%	1,115,916	0.57%	825,549	0.42%
31-Mar-18	197,947,908	2,902,898	1.47%	1,519,510	0.77%	628,225	0.32%
31-Mar-19	196,200,911	3,173,289	1.62%	1,345,249	0.69%	863,660	0.44%
31-Mar-20	197,339,792	2,638,460	1.34%	1,315,781	0.67%	788,367	0.40%
31-Mar-21	217,531,423	2,661,984	1.22%	1,109,714	0.51%	760,175	0.35%

*Principal amount outstanding excludes principal balance of loans which are greater than 120 days delinquent, or in cases where the obligor has filed for bankruptcy, died or reached a settlement due to hardship as of report date.

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Loan Loss Reserves ("LLR")

- The NYSERDA LLR provides partial loss coverage for eligible financings – used for Energy Efficiency and Renewable Energy ("EE/RE") Financing Solutions for Residential, Small Commercial, NFP and Multifamily buildings.

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- In the event of a default, the investor can recoup a portion of their losses from the reserve fund, up to a maximum sizing of the reserve fund thereby broadening access to capital and lowering interest rates.

Loan Loss Reserves ("LLR")

- Loan loss reserve funds take a portfolio approach to credit structuring. The loan loss reserve approximates the anticipated default rate on all the loans in the portfolio, which can mitigate lender risk and open up the market for additional EE/RE lending.

- Programs have been successfully deployed in CA, CT, MA, MI with direct impact to underserved borrowers

Loan Loss Reserve Impacts

The LLR *could be expected* to have the following impacts:

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- ***Expand underwriting criteria****. Lender can consider expanded underwriting criteria (e.g. lower consumer* credit scores or no minimum).

Lender Selection Approach

You Apply

Confirm eligibility

Propose qualified products

Explain how LLR will improve products for borrowers

Lender Selection Approach

You Apply → Confirm eligibility → Propose qualified products → Explain how LLR will improve products for borrowers

We Approve → Initial funding allocation based on sector(s) served → We contribute to LLR account for each qualified financing → Lenders recoup 90% of loan losses from LLR account

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You Report	Lenders provide monthly portfolio performance report	Initial funding amount may be increased after reaching limit	Or reduced if origination goals are not met after 1 year

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Loan Loss Reserves Terms

Sector	Max Loan Amount	Initial LLR Funding Allocation	LLR Portfolio Maximum Coverage
Residential (1-4 family)	$50k	$500,000	• 10% > 660 FICO • 35% = < 660 FICO • Minimum 35% of Portfolio loans = < 680 FICO or Lower Income at or below 80% AMI or SMI, whichever is greater
Small Commercial (<100 employees)	$500k	$500,000	• 20% of 1st $50k; • 5% remaining $450k
Multifamily (5+ units)	$1MM	$1MM	• 20% of 1st $50k; • 5% remaining $950k • Minimum 35% of Portfolio loans to Affordable Multifamily Buildings
Not-for-Profit	$500k	$1MM	• 20% of 1st $50k; • 5% remaining $450k

Loan Loss Reserves Terms

A minimum of 35% of the Residential Loans must be to consumers with a FICO score = < 680 or lower income.

A minimum of 35% of lending in the Multifamily Sector must be for Affordable Multifamily Buildings

LLR offered for any type of financing – e.g. loan, lease, PPA, energy services agreement

New financing structures encourages – ESA, MSA, PAYS, off-balance sheet approaches, and performance-based structures

No prepayment penalty

LLR stays with financing structure for asset sale or securitization through maturity

Residential debt products min 580 FICO, but performance-based structures can be offered <580

Contact

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Inclusiv Supporting Green Lending for Community Financial Institutions

inclusiv

Certified CDFI intermediary and a national network of community-development credit unions.

Mission is to help low- and moderate-income people and communities achieve financial independence through credit unions.

375+ member credit unions serve over 13 million residents of low-income urban, rural and reservation-based communities across the US and hold over $177 billion in community-controlled assets.

Inclusiv Center for Resiliency and Clean Energy - Building a network of credit unions to scale financing solutions that combat climate change, improve community resiliency, and increase access to affordable and sustainable energy for all people.

/ inclusiv / clean energy

Training and Support to Build Green Loan Products

- Instructor-led training cohorts with accessible online trainings
- Alumni network and follow-up technical support
- Professional Certificate in Solar Lending

Collaborative Infrastructure

- Operating and technology platforms
- Investment vehicles and funds
- Loan participation mechanisms and secondary markets
- Partnerships between lenders

Movement Building

- Policy development and advocacy
- Industry analysis
- Cross-sectoral convenings

Consumer Solar Lending Training - Fall 2020 Cohort

Inclusiv and University of New Hampshire

Solar Lending Professional Training and Certificate

- Low to no cost virtual series for community-based lending professionals.
- Two learning tracks: Consumer and Commercial Lending.
- Small cohorts with high capacity to implement solar loan programs at their institutions.
- All content designed to help participants build solar loan programs for their financial institutions.
- Earn Solar Lending Professional Certificate from the University of New Hampshire and Inclusiv.
- Ongoing technical assistance after course completion.

Two Learning Tracks

Solar Lending Professional Training and Certificate

CONSUMER SOLAR LENDING MODULES:

1. Intro to Solar Finance
2. Consumer Solar Basics
3. Solar Contractors and Providers
4. Solar Market Analysis
5. Solar Loan Product Design
6. Solar Lending Program Implementation
7. Lending Deeper In Your Community

COMMERCIAL SOLAR LENDING

1. Assessing Market Opportunities
2. Regulatory Context for the Solar Business
3. Solar Development: The Players and Process
4. The Solar Capital Stack
5. Underwriting a Solar Deal: The Project Model
6. Case Study #1 Commercial And Industrial
7. Case Study #2 Multi-Family
8. Case Study #3 Community Solar

Apply here: https://carsey.unh.edu/center-for-impact-finance/solar-lending-training-series

Thank you!
Contact Us To Learn More:

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Clean Energy Financing: Starting a Renewable Energy Lending Program

How Amalgamated Did It

Acquired New Resource Bank (San Francisco) in May of 2018

- Expertise in Commercial & Residential Solar, Bio-Digesters, Energy Efficiency, and PACE
- Expanded from small commercial transactions in California ($500 thousand to $3 million) to larger developer relationships nationwide ($3 million to $25 million)
- From $0 loans outstanding in Renewables and Energy Efficiency to over $800 million in Residential Solar, Commercial Solar, C-PACE and R-PACE in less than 3 years.

Starting Organically

- **Identify which asset classes fit your strategy**:
  - Consumer: Residential Solar, Residential PACE
  - Commercial: Commercial Solar, Commercial PACE, Bio-Digester, Wind
- **Get buy-in from leadership across departments** (and have a Renewable Energy Lending Champion on the E-Team!):
  - Risk
  - Legal
  - Accounting
  - Operations
  - Portfolio Management
- **Utilize Available Resources**
  - Solar/Renewables Conferences (SPI, InfoCast)
  - Trade Associations (SEIA, PACENation)
  - Specialty Training (Inclusiv)
  - Data Providers (NREL, EIA)

Finding Opportunities

- Existing Customer Base
  - Most cost effective
  - CRE/Mortgage customer mining
- Fintech Partners and Platforms
  - Open Energy Group
  - Twain Financial
  - Karbone
- Participation with Other Lenders
- Solar/Renewables Conferences (SPI, InfoCast)
- Loan Purchases

Lessons Learned

- Resource Allocation is Critical
- Build Lending/Developer Relationships (Not Transactions)
- Establish your Risk Appetite and Stay Disciplined (But Understand the Market Dynamics)
- Opportunities Abound!

Thank You

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